

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A recording apparatus of a helical scan type capable of recording data as inclined tracks onto a tape-shaped recording medium, comprising:
- a rotary drum having N recording heads on a circumference thereof;
 - a first series code generating means for generating a first series code by adding a first parity to a first data array in a predetermined direction;
 - a second series code generating means for generating a second series code by adding a second parity to a second data array in a direction orthogonal to said direction of said first data array; and
 - a recording control means for controlling recording such that said first series code is recorded by one of said N recording heads and said second series code is recorded by said N recording heads in a dispersed manner over a plurality of tracks, on said tape-shaped recording medium,
- wherein said second series code generating means generates said second series code such that a ratio between said second parity and said second series code equals at least $1/N$,
- wherein said number N of said recording heads are 4 or more, and
- wherein said first series code is recorded across a plurality of tracks, which are formed by one of said N recording heads.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) A recording method for a recording apparatus of a helical scan type which records data as inclined tracks onto a tape-shaped recording medium by N recording heads disposed on a circumference of a rotary drum, said method comprising the steps of:

generating a first series code by adding a first parity to a first data array in a predetermined direction;

generating a second series code such that a ratio between second parity and a second data array equals at least $1/N$, wherein said second parity is added to said second data array in a direction orthogonal to said direction of said first data array of said first series code; and

controlling recording such that said first series code is recorded by one of said N recording heads on said tape-shaped recording medium and said second series code is recorded by said N recording heads in a dispersed manner over a plurality of tracks,

wherein said number N of said recording heads are 4 or more, and

wherein said first series code is recorded across a plurality of tracks, which are formed by one of said N recording heads.